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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,830	01/31/2002	Jarno Marchetto	3282/0K042	4350

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09/22/2006

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EXAMINER

NAWAZ, ASAD M

ART UNIT PAPER NUMBER

2155

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/062,830

Applicant(s)

MARCHETTO

Examiner

Asad M. Nawaz

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8 and 11-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to the Request for Continued Examination received on 6/30/06. Claims 1, 2, 4, 5, 7, 13-17, and 20 have been amended. No new claims have been added and no claims have been canceled. Claims 1-8 and 11-20 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 and 11-20 rejected under 35 U.S.C. 103(a) as being unpatentable over as being taught by Wang et al (USPN: 5,867,230) further in view of Cooper et al (USPN: 6,681,255).

As to claim 1, Wang teaches a method of using controlling the wait time O_w between the start of transmission of successive packets of known packet size (P) of a content to be transmitted to achieve a target bandwidth (BT) during the transmission comprising the steps of: selecting a target bandwidth (BT) sought to be achieved during the transmission (col 1, line 64 to col 2, line 3; a target data rate is selected); and controlling the transmission of the packets using so that there is a residual time (t) between the end of transmission of one packet and the start of transmission of the next packet to establish the wait time tw (col 4, lines 42-57; col 5, lines 50-67; the logic controls the frame to be encoded by a plurality of variables) .

However, Wang et al does not explicitly indicate computing a wait time (tw) between the start of successive packets of the transmission using the algorithm $tw=P/Br$.

Cooper et al teach that a wait time is calculated by dividing a packet size (called bytes AGG) by the targeted bandwidth. Also, a residual time equaling to the end of transmission of one packet and the start of the next is factored in (Figs 3 and 4; col 5, lines 1-42).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Cooper et al into those of Wang et al to effectively manage the network. Controlling the bandwidth and maintaining a desired rate would allow the administrator to effectively manage QoS requirements while providing a balance of availability and efficiency.

As to claim 2, Wang et al teaches the method as claimed in claim 1 wherein the residual time t that is used is rounded to a time unit (col 5, lines 38-46; times are rounded to preset limits).

As to claim 3, Wang et al teaches the method as claimed in claim 2 wherein the rounding to the time unit is accomplished by a counter (col 5, lines 38-46).

As to claim 4, Wang et al teaches the method as claimed in claim 5 wherein the time used is determined by: determining the start time t_1 of transmission of a packet,

determining the end time t_2 of transmission of the packet, and determining the time used t_{used} in transmitting the packet as $t_2 - t_1$ (col 6, lines 50-7).

As to claim 5, Wang et al teaches the method as claimed in claim 4 wherein the step of controlling further comprises the steps of: determining a time used (t_{used}) in the transmission of a packet and waiting the residual time t between the end of transmission of one packet to the start of transmission of the next packet (col 4, lines 42-57; col 5, lines 50-67; the logic controls the frame to be encoded by a plurality of variables).

As to claim 6, Wang et al teaches the method as claimed in claim 5 further comprising the step of repeating steps (a) and (b) for each packet transmitted (abstract).

As to claim 7, Wang teaches a method as in claim 1 wherein the controlling of the transmission of the packets with a residual time t between successive packets is comprised of: determining a value of start time t_{start} , of sending a packet and a current time t_{now} , performing a loop operation of:

- (a) computing a time $t_{elapsed} = t_{now} - t_{start}$,
- (b) comparing $t_{elapsed}$ to the residual time t and transmitting the next packet when the value of $t_{elapsed} - t$ (refer to Fig 4; col 4, lines 8-16; col 5, lines 38-46; col 6, line 31).

As to claim 8, Wang teaches the method as claimed in claim 7 further comprising the steps of computing an error value $= t_{elapsed} - t$ and subtracting the value from a later supplied value of t (col 1, lines 24-57).

As to claim 11, Wang teaches the method of claim 1, including the additional step of selecting the known packet size (P) of the packets to be transmitted (see Fig 6).

As to claim 12, Wang teaches the method of claim 1 wherein the known packet size (P) is provided by an application (see Fig 6).

Claims 13-20 are essentially the apparatus of the above-mentioned method claims and present no new limitations. Thus, they are rejected under similar rationale.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asad M. Nawaz whose telephone number is (571) 272-3988. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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PRIMARY EXAMINER